Clark County Waste to Energy

REGIONAL WASTE MEETING

MARCH 4, 2010

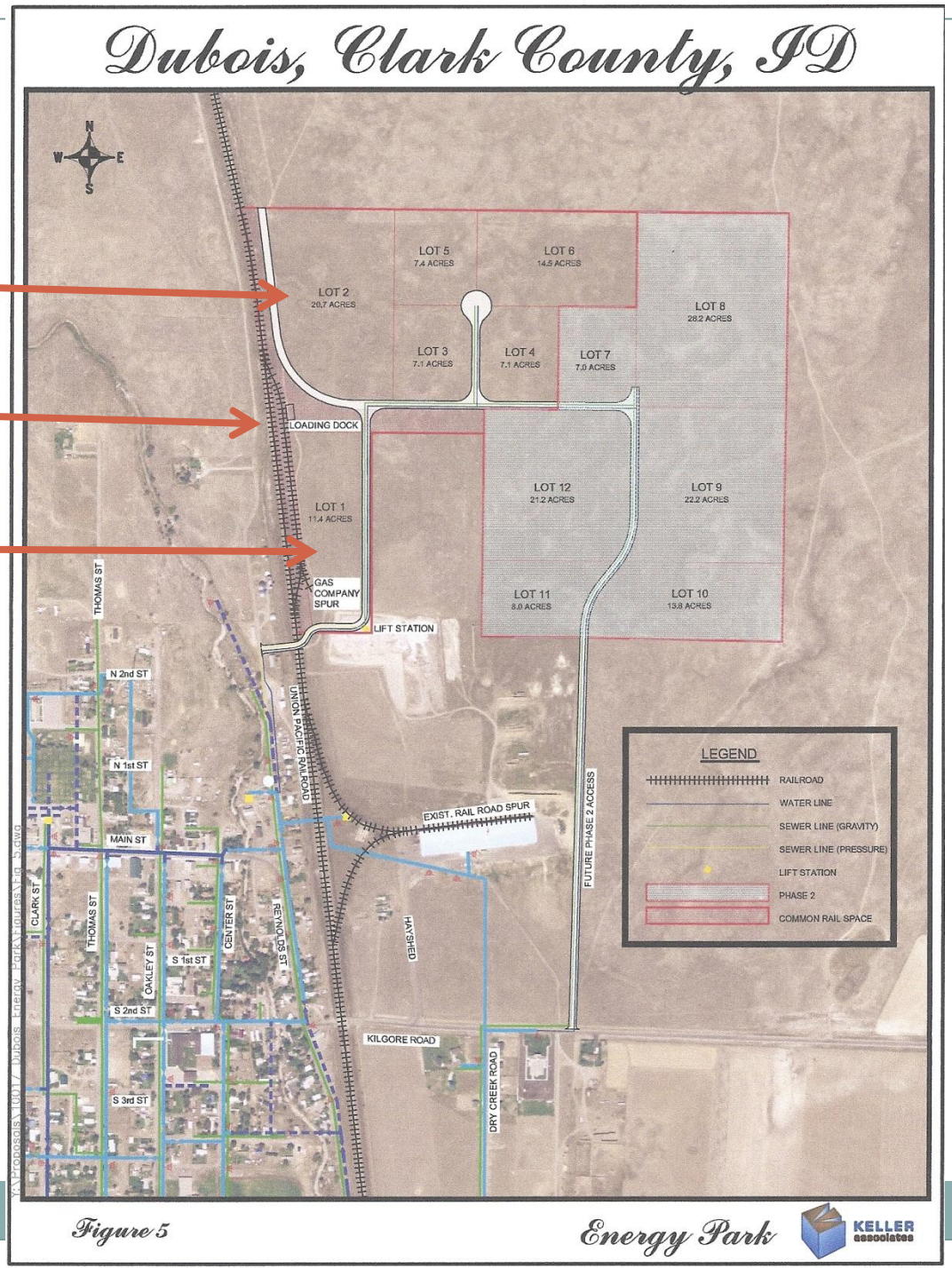
Clark County W2E Update

- Site Selection
  - Clark County, City of Dubois, and Mud Lake Telephone Cooperative purchasing 151 Acres in Dubois with local funds
  - Park will be called the Centennial Energy and Technology Park
  - Mud Lake Telephone Created a new Propane Enterprise which will begin construction mid April
  - Waste to Energy Plant to be located on Lot 2 in Park
  - City of Dubois is apply for an Economic Block Grant to install infrastructure including rail spur.
  - Clark County met with Union Pacific on March 2 in Dubois to discuss rail service

Waste to Energy Plant

Loading Dock

Propane Distribution



Clark County Waste to Energy Plant

- 250 Ton Per Day - ~100,000 TPY Capacity
  - County Waste Streams
    - Clark County 3,000
    - Madison 20,000
    - Teton 10,000
    - Jefferson ?
    - Fremont ?
    - Bingham ?
    - Bonneville ~ 67,000 (freeboard)
- Power Produced ~12-14 MWH

Clark County Economic Development

- Clark County's Goal – Create Jobs
  - Created Energy and Technology Park
  - Recruitment of Businesses
    - Propane Distribution
    - Rail Transportation Center
      - Transportation of Lime
      - Transportation of Travertine
    - Green Houses
    - Cement Products
- To meet the Goal Clark County needs your help!

Issues Facing Clark County W2E Plant

- Financing for a Waste to Energy Plant of this type is only available through the issuance of revenue bonds
- Revenue Bonds for this type of facility can only be issued if the income has been secured.
- Income is secured in two ways for a Waste to Energy Facility:
  - Solid Waste streams have to be committed
  - Electrical Power sales contract has to be in place

Issues Facing Clark County W2E Plant

- Securing waste streams, i.e., long term contract, requires one of two actions by the individual counties:
  - Seek Voter Approval – 2/3 majority
  - Participate in a Solid Waste District as allowed under Idaho Code Title 31 Chap. 49
- By creation of a regional solid waste district, the counties can identify by resolution where and how the waste is to be managed.
- By creation of a regional solid waste district, the counties can work together to manage the waste disposal costs, thus lowering the counties' reliance on fees or property taxes.
- By creation of a regional solid waste district, cost savings and potential income from the waste to energy conversion technology can be realized.

Issues Facing Clark County W2E Plant

- Revenue Bonds can be issued through two avenues:
  - A conduit bond – bonds issued on behalf of a private facility owner through the County as authorized by a simple majority vote
  - Straight revenue bonds, based on revenue and expenses from the facility, issued by resolution by the District
- Why District Bonding
  - Control of the investment will remain with the District
  - No debt liability is imposed on the Counties
  - Revenue brought into the District is the guarantee on the Bonds
  - Can be accomplished by Resolution with Judicial Confirmation

Issues Facing Clark County W2E Plant

- Clark County has chosen the Dynamis Energy technology for deployment in the Regional Waste to Energy Plant. In support of the due diligence currently being conducted by Clark County, Dynamis Energy has offered to issue a performance bond for the total value of the plant, **guaranteeing** that the technology will perform as promised.
- Dynamis Energy has already begun discussions with Idaho DEQ on Air Quality permits. Further work with Idaho DEQ is contingent on Dynamis receiving a request to construct a Regional Plant

Regional Solid Waste District

- Created under Idaho Code Title 31 Chapter 49
  - District creation documents are draft based on the Southern Idaho Waste District; revisions are expected through participative negotiations. This is not an all or nothing request.
  - The district can be formed for no other reason than to continue the process of:
    - Identifying the actual waste tonnage to be diverted from landfills
    - Model potential emissions that can be expected from operations of the Plant using the Dynamis Technology - Permits from DEQ can be applied for
    - Identifying costs to divert waste and the impact on each county's budget
    - Plant purchase price can be negotiated
    - Formal Operations costs, including transportation, can be established
    - Power Purchase agreements can be explored based on the actual tonnage
    - Other preparatory tasks can be completed

Regional Solid Waste District

- Counties creating the waste district face no risk. If the technology or cost benefit does not prove beneficial, the district will be dissolved by resolution just as it was created.
- The location of the proposed plant is based on the need to create living wage jobs in Clark County. While a central location may be more logical, this effort has a singular goal – **job creation** in Clark County. The proposal waste developed in such a way that it creates the desired jobs while providing a benefit to our neighbors, including strengthening the regional economy.

DYNAMIS ENERGY

Clark County Project Timeline

Legend:
DE=Dynamis Energy
WM=Whisper Mount
CC=Clark County

	Pre Construction Timeline						Construction Timeline												Post Construction Timeline		
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21
Negotiate Power Purchase Agreement	WM	WM	WM	WM	WM	WM															
Secure Waste Stream	WM	WM	WM	WM	WM	WM															
Finalize Contract			DE																		
Local Permit			CC	CC	CC																
State Permit	DE	DE	DE	DE	DE	DE															
Project Financing	CC	CC	CC																		
Building and Land Acquisition		CC	CC	CC																	
Secure Rail Spur Right				CC	CC	CC															
Order and Secure Permanent Utilities				CC	CC	CC															
Order and Secure Construction Utilities			DE	DE																	
Final Site Inspection						DE															
Preliminary Design and Pricing	DE	DE																			
Detail Design and Engineering			DE	DE	DE																
Finalize Project Cost						DE															
Owner Approval						CC															
Foundation Work Begins						DE															
Conduit & Piping						DE															
Order Long Lead Turbines				DE																	
Order Long Lead Boilers				DE																	
Equipment Selection and Procurement				DE	DE	DE	DE	DE													
Building Construction Begins							DE	DE	DE	DE	DE	DE	DE	DE	DE	DE	DE	DE			
Electrical Installation									DE	DE	DE	DE	DE								
Finish Building and Utilities											DE	DE	DE								
Mfg Primaries and Secondaries							DE	DE	DE	DE											
Install Primaries and Secondaries											DE	DE	DE	DE	DE						
Install Ash Handling/Reclaim Equipment														DE	DE						
Install Boilers and Controls														DE	DE	DE	DE				
Install Turbines and Controls														DE	DE	DE	DE				
Construct Water Storage and Cooling Towers														DE	DE	DE	DE				
Construct Vaporizer and Building														DE	DE	DE	DE				
Install Stack and Emission Equipment														DE	DE	DE	DE				
Install and Test Control System														DE	DE	DE	DE				
Install Sprinkler and Fire Suppression														DE	DE	DE	DE				
Install Fencing and Security														DE	DE	DE	DE				
Function Checkout																	DE	DE			
Author Operating Manuals																DE	DE	DE			
Plant Start Up																		DE	DE		
Outside Independent Testing and Certs																		DE	DE		
Final Permitting Approvals																		DE	DE	CC	CC
Commercial Operation Testing and Training																		DE	DE	DE	DE
Total Time Elapse by Month	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21

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